

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	187	"time gradation"	US-PGPUB; USPAT	OR	ON	2006/06/24 15:33
S2	142	"time gradation" and ("liquid crystal" or plasma or thresholdless or ferroelectric or pixel)	US-PGPUB; USPAT	OR	ON	2003/09/02 11:47
S3	0	"time gradation" and thresholdless	US-PGPUB; USPAT	OR	ON	2002/11/25 10:18
S4	22	"time gradation" and ferroelectric	US-PGPUB; USPAT	OR	ON	2002/11/25 10:35
S5	21	"time gradation" and ferroelectric and pixel	US-PGPUB; USPAT	OR	ON	2002/11/25 10:36
S6	21	"time gradation" and ferroelectric and (pixel or TFT)	US-PGPUB; USPAT	OR	ON	2002/11/25 16:02
S7	12	"time gradation" and ferroelectric and (pixel or TFT) and bit	US-PGPUB; USPAT	OR	ON	2003/09/04 08:57
S8	9	"time gradation" and ferroelectric and upper and lower and bit	US-PGPUB; USPAT	OR	ON	2003/09/02 13:01
S9	8	"time gradation" and (subfield or subframe or "sub field" or "sub frame") and "voltage level"	US-PGPUB; USPAT	OR	ON	2002/11/25 16:16
S10	27	"time gradation" and (subfield or subframe or "sub field" or "sub frame")	US-PGPUB; USPAT	OR	ON	2002/11/25 16:48
S11	108	"time gradation" and bit	US-PGPUB; USPAT	OR	ON	2002/11/25 16:55
S12	273	(345/690.ccls. or 345/89.ccls.) and "voltage level"	US-PGPUB; USPAT	OR	ON	2002/11/25 16:57
S13	187	(345/690.ccls. or 345/89.ccls.) and "voltage level" and bit	US-PGPUB; USPAT	OR	ON	2002/11/25 18:49
S14	30	(345/690.ccls. or 345/89.ccls.) and "voltage level" and bit and "D/A"	US-PGPUB; USPAT	OR	ON	2002/11/25 18:56
S15	87	(345/690.ccls. or 345/89.ccls.) and (subframes or subfields or "sub frames" or "sub fields") and bit	US-PGPUB; USPAT	OR	ON	2002/11/25 18:57
S16	47	(345/690.ccls. or 345/89.ccls.) and (subframes or subfields or "sub frames" or "sub fields") and bit and analog	US-PGPUB; USPAT	OR	ON	2002/11/26 10:41
S17	1	"6320565".pn.	US-PGPUB; USPAT	OR	ON	2002/11/26 11:45
S18	1	"5670979".PN.	USPAT	OR	OFF	2002/11/26 10:42
S19	1	"5532763".PN.	USPAT	OR	OFF	2002/11/26 10:43

## EAST Search History

S20	1	"6232941".pn.	US-PGPUB; USPAT	OR	ON	2002/11/26 15:27
S21	1	"6067066".pn.	US-PGPUB; USPAT	OR	ON	2003/06/03 16:35
S22	116	(345/89 or 345/690 or 345/95 or 345/691 or 345/692).ccls. and "temporal"	US-PGPUB; USPAT	OR	ON	2006/08/07 17:08
S23	23	(345/89 or 345/690 or 345/95 or 345/691 or 345/692).ccls. and "temporal" and ("D/A" or decoder)	US-PGPUB; USPAT	OR	ON	2003/06/03 16:45
S24	1	( 345/692).ccls. and "temporal" and ("D/A" or decoder)	US-PGPUB; USPAT	OR	ON	2003/06/03 16:45
S25	44	( 345/692).ccls.	US-PGPUB; USPAT	OR	ON	2003/06/03 16:45
S26	186	"time gradation" and ("liquid crystal" or plasma or thresholdless or ferroelectric or pixel)	US-PGPUB; USPAT	OR	ON	2003/09/02 11:48
S27	10	"time gradation" and ferroelectric and upper and lower and bit	US-PGPUB; USPAT	OR	ON	2003/09/02 13:01
S28	14	"time gradation" and ferroelectric and (pixel or TFT) and bit	US-PGPUB; USPAT	OR	ON	2003/09/04 09:08
S29	26	"time gradation" and "D/A converter"	US-PGPUB; USPAT	OR	ON	2003/09/04 09:44
S30	33	thresholdless and ferroelectric and "D/A converter"	US-PGPUB; USPAT	OR	ON	2003/09/04 09:54
S31	33	thresholdless and ferroelectric and "D/A converter" and ("gray scale" or grayscale or gradation)	US-PGPUB; USPAT	OR	ON	2003/09/04 09:56
S32	19	thresholdless and ferroelectric and "D/A converter" and ("gray scale" or grayscale or gradation) and bit	US-PGPUB; USPAT	OR	ON	2003/09/04 10:04
S33	615	((upper adj2 bit) same (lower adj2 bit)) and ("345"/\$.ccls. or "349"/\$.ccls. )	US-PGPUB; USPAT	OR	ON	2003/09/04 10:06
S34	187	((upper adj2 bit) same (lower adj2 bit)) and ("345"/\$.ccls. or "349"/\$.ccls. ) and (greyscale or "gray scale" or gradation)	US-PGPUB; USPAT	OR	ON	2003/09/04 10:19
S35	20	PDP same TFT same pixel	US-PGPUB; USPAT	OR	ON	2003/09/04 10:28
S36	114	("time ratio" or "time division" or "time gradation") and (greyscale or "grey scale" or gradation) and TFT and bit	US-PGPUB; USPAT	OR	ON	2003/09/04 11:36
S37	1	"4490741".pn.	US-PGPUB; USPAT	OR	ON	2003/09/04 11:36

## EAST Search History

S38	404	"time gradation"	US-PGPUB; USPAT	OR	ON	2005/12/11 18:17
S39	90	"time gradation" and bit and TFT	US-PGPUB; USPAT	OR	ON	2005/12/11 18:18
S40	40	"time gradation" and bit and TFT and pattern	US-PGPUB; USPAT	OR	ON	2005/12/11 18:21
S41	38	"time gradation" and bit and TFT and pattern and frame	US-PGPUB; USPAT	OR	ON	2005/12/11 18:24
S42	18	"time gradation" and bit and TFT and pattern and frame and (subframe or "sub frame")	US-PGPUB; USPAT	OR	ON	2005/12/11 19:11
S43	4	"time gradation" and "2.sup.M-N"	US-PGPUB; USPAT	OR	ON	2005/12/11 19:31
S44	0	"time gradation" and "2.sup.j-k"	US-PGPUB; USPAT	OR	ON	2005/12/11 19:31
S45	0	"time gradation" and "2.sup.a-b"	US-PGPUB; USPAT	OR	ON	2005/12/11 19:32
S46	1	"time gradation" and "2.sup.\$-\$"	US-PGPUB; USPAT	OR	ON	2005/12/11 19:44
S47	78	"time gradation" and (345/87-100 or 345/204 or 345/690-692).ccls.	US-PGPUB; USPAT	OR	ON	2005/12/11 19:47
S48	78	"time gradation" and (345/87-100 or 345/204 or 345/690-692 or 345/600).ccls.	US-PGPUB; USPAT	OR	ON	2005/12/11 19:47
S49	6	("20030048238" "20030137478" "20050007331" "6459416" "6753854" "6897884").PN.	US-PGPUB; USPAT	OR	ON	2006/06/24 15:36
S50	45	("20020047852" "20020047852" "20030058210" "20030058210" "3675232" "4042854" "4090219" "4750813" "4864390" "4907862" "5122784" "5122792" "5272471" "5327229" "5337171" "5349366" "5414442" "5428366" "5528262" "5642129" "5724058" "5784073" "5874933" "5892496" "5917471" "5953002" "5956105" "5959603" "5990629" "6049367" "6069609" "6072454" "6078304" "6108058" "6184874" "6184874" "6188379" "6188379" "6215466" "6215466" "6292168" "6292168" "6297813" "6297813" "6300927" "6300927" "6320568" "6320568" "6326941" "6326941" "6331844" "6331844" "6369785" "6369785" "6380917" "6380917" "6590581" "6753854").PN.	US-PGPUB; USPAT	OR	ON	2006/06/24 15:41
S51	68	"2.SUP.(M-N)"	US-PGPUB; USPAT	OR	ON	2006/06/24 15:44

## EAST Search History

S52	5	S51 AND (S49 OR S50)	US-PGPUB; USPAT	OR	ON	2006/06/24 15:43
S53	25	"2.SUP.(K-J)"	US-PGPUB; USPAT	OR	ON	2006/06/24 15:44
S54	1	"2.SUP.(K-J)" AND "345"/\$.CCLS.	US-PGPUB; USPAT	OR	ON	2006/06/24 15:45
S55	0	"2.SUP.(A-B)" AND "345"/\$.CCLS.	US-PGPUB; USPAT	OR	ON	2006/06/24 15:46
S56	0	"2.SUP.(I-J)" AND "345"/\$.CCLS.	US-PGPUB; USPAT	OR	ON	2006/06/24 15:46
S57	14	"2.SUP.(M-N)" AND "345"/\$.CCLS.	US-PGPUB; USPAT	OR	ON	2006/06/24 16:00
S58	20	"2.SUP.(M-N)" AND PIXEL	US-PGPUB; USPAT	OR	ON	2006/06/24 15:52
S59	13	"2.SUP.(M-N)" AND PIXEL AND FRAME	US-PGPUB; USPAT	OR	ON	2006/06/24 15:57
S60	0	"2.SUP.(J-K)" AND PIXEL AND FRAME	US-PGPUB; USPAT	OR	ON	2006/06/24 15:57
S61	0	"2.SUP.(I-J)" AND PIXEL AND FRAME	US-PGPUB; USPAT	OR	ON	2006/06/24 15:58
S62	0	"2.SUP.(N-O)" AND PIXEL AND FRAME	US-PGPUB; USPAT	OR	ON	2006/06/24 15:58
S63	0	"2.SUP.(A-B)" AND PIXEL AND FRAME	US-PGPUB; USPAT	OR	ON	2006/06/24 15:58
S64	0	"2.SUP.(J-K)" AND PIXEL AND FRAME	US-PGPUB; USPAT	OR	ON	2006/06/24 15:58
S65	13	"2.SUP.(M-N)" AND PIXEL AND FRAME	US-PGPUB; USPAT	OR	ON	2006/06/24 15:59
S66	8	"4910687".UREF.	US-PGPUB; USPAT	OR	ON	2006/06/24 15:59
S67	68	"2.SUP.(M-N)"	US-PGPUB; USPAT	OR	ON	2006/06/24 16:01
S68	20	"2.SUP.(M-N)" AND PIXEL	US-PGPUB; USPAT	OR	ON	2006/06/24 16:09
S69	16	"2.SUP.(M-N)" AND FRAME	US-PGPUB; USPAT	OR	ON	2006/06/24 16:11
S70	16	"2.SUP.(M-N)" AND FRAME	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/24 16:11

## EAST Search History

S71	0	"2.SUP.(J-K)" AND FRAME	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/24 16:11
S72	2	"2.SUP.(K-J)" AND FRAME	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/24 16:13
S73	8	"2.SUP.(M-N)" AND SUBFRAME	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/24 16:14
S74	68	"2.SUP.(M-N)"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 15:32
S75	81	"2.SUP.(\$)" AND PIXEL AND FRAME	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/24 16:16
S76	6	"2.SUP.(\$)" AND PIXEL AND FRAME AND SUBFRAME	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/24 16:27
S77	6	"2.SUP.(\$-\$)" AND PIXEL AND FRAME AND SUBFRAME	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/24 16:28
S78	6	"2.SUP.\$" AND PIXEL AND FRAME AND SUBFRAME	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/24 16:29

## EAST Search History

S79	90	"2.SUP" AND PIXEL AND FRAME AND SUBFRAME	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/24 16:31
S80	0	"2.SUP" AND PIXEL AND FRAME.AB. AND SUBFRAME.AB.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/24 16:31
S81	150	PIXEL AND FRAME.AB. AND SUBFRAME.AB.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/24 16:31
S82	95	PIXEL.AB. AND FRAME.AB. AND SUBFRAME.AB.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/24 16:31
S83	5	("5952988" "6323938" "6326944" "6421035" "6819309").PN.	US-PGPUB; USPAT	OR	ON	2006/06/24 16:52
S84	1	"6392620".PN.	US-PGPUB; USPAT	OR	ON	2006/06/24 16:52
S85	8	"4910687".uref.	US-PGPUB; USPAT	OR	ON	2006/08/04 18:41
S86	249	(345/89 or 345/690 or 345/95 or 345/691 or 345/692).cccls. and "temporal"	US-PGPUB; USPAT	OR	ON	2006/08/07 17:09
S87	7	(345/89 or 345/690 or 345/95 or 345/691 or 345/692).cccls. and "2.SUP. (M-N)"	US-PGPUB; USPAT	OR	ON	2006/08/07 17:09
S88	1	"5682511".pn.	US-PGPUB; USPAT	OR	ON	2006/08/08 09:41
S89	1	"4,910,687".pn.	US-PGPUB; USPAT	OR	ON	2006/08/08 10:14
S90	284	EL and "liquid crystal" and projector and goggle and portable and notebook	US-PGPUB; USPAT	OR	ON	2006/08/08 10:23
S91	255	EL and "liquid crystal" and projector and goggle and portable and notebook and transistor	US-PGPUB; USPAT	OR	ON	2006/08/08 10:44
S92	255	EL and "liquid crystal" and projector and goggle and portable and notebook and transistor and pixel	US-PGPUB; USPAT	OR	ON	2006/08/08 10:15

## EAST Search History

S93	247	EL and "liquid crystal" and projector and goggle and portable and notebook and transistor and pixel and front and rear	US-PGPUB; USPAT	OR	ON	2006/08/08 10:15
S94	217	EL and "liquid crystal" and projector and goggle and portable and notebook and transistor and pixel and front and rear and three	US-PGPUB; USPAT	OR	ON	2006/08/08 10:16
S95	3	("5953002" "6590581" "6753854").PN.	US-PGPUB; USPAT	OR	ON	2006/08/08 10:27
S96	42	("20020047852" "20030058210" "3675232" "4042854" "4090219" "4750813" "4864390" "4907862" "5122784" "5122792" "5272471" "5327229" "5337171" "5349366" "5414442" "5428366" "5528262" "5642129" "5724058" "5784073" "5874933" "5892496" "5917471" "5956105" "5959603" "5990629" "6049367" "6069609" "6072454" "6078304" "6108058" "6184874" "6188379" "6215466" "6292168" "6297813" "6300927" "6320568" "6326941" "6331844" "6369785" "6380917").PN.	US-PGPUB; USPAT	OR	ON	2006/08/08 10:28
S97	25	("20020047852" "20030058210" "3675232" "4042854" "4090219" "4750813" "4864390" "4907862" "5122784" "5122792" "5272471" "5327229" "5337171" "5349366" "5414442" "5428366" "5528262" "5642129" "5724058" "5784073" "5874933" "5892496" "5917471" "5956105" "5959603" "5990629" "6049367" "6069609" "6072454" "6078304" "6108058" "6184874" "6188379" "6215466" "6292168" "6297813" "6300927" "6320568" "6326941" "6331844" "6369785" "6380917").PN. and bit	US-PGPUB; USPAT	OR	ON	2006/08/08 10:40
S98	7	("20020047852" "20030058210" "3675232" "4042854" "4090219" "4750813" "4864390" "4907862" "5122784" "5122792" "5272471" "5327229" "5337171" "5349366" "5414442" "5428366" "5528262" "5642129" "5724058" "5784073" "5874933" "5892496" "5917471" "5956105" "5959603" "5990629" "6049367" "6069609" "6072454" "6078304" "6108058" "6184874" "6188379" "6215466" "6292168" "6297813" "6300927" "6320568" "6326941" "6331844" "6369785" "6380917").PN. and bit and (subframe or "sub frame")	US-PGPUB; USPAT	OR	ON	2006/08/08 10:40

## EAST Search History

S99	85	EL and "liquid crystal" and projector and goggle and transistor and bit and (subframe or "sub frame")	US-PGPUB; USPAT	OR	ON	2006/08/08 11:13
S10 0	6	("20010004257" "20020060676" "20020075252" "20020075253" "20020180718" "5670969").PN.	US-PGPUB; USPAT	OR	ON	2006/08/08 14:21
S10 1	1	"6611246".pn.	US-PGPUB; USPAT	OR	ON	2006/08/08 14:21
S10 2	2	("5682511" or "4910687").pn.	US-PGPUB; USPAT	OR	ON	2007/01/26 15:29
S10 3	74	"2.SUP.(M-N)"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 15:54
S10 4	23	"2.SUP.(M-N)" and (pixel or "liquid crystal display")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:03
S10 5	13	("2.SUP.(M-N)" with bit) and (pixel or "liquid crystal display")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:54
S10 6	0	("2.SUP.(J-K)" with bit) and (pixel or "liquid crystal display")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:10
S10 7	0	("2.SUP.(I-J)" with bit) and (pixel or "liquid crystal display")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:11
S10 8	2	("2.SUP.(K-J)" with bit) and (pixel or "liquid crystal display")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:45



## EAST Search History

S10 9	94	("20020047852" "20020047852" "20030058210" "20030058210" "3675232" "4042854" "4090219" "4750813" "4864390" "4907862" "4910687" "5122784" "5122792" "5272471" "5327229" "5337171" "5349366" "5414442" "5428366" "5528262" "5642129" "5724058" "5784073" "5874933" "5892496" "5917471" "5953002" "5956105" "5959603" "5990629" "6049367" "6069609" "6072454" "6078304" "6108058" "6184874" "6184874" "6188379" "6188379" "6215466" "6215466" "6292168" "6292168" "6297813" "6297813" "6300927" "6300927" "6320568" "6320568" "6326941" "6326941" "6331844" "6331844" "6369785" "6369785" "6380917" "6380917" "6590581" "6753854").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:45
S11 0	1	"6459416".PN.	USPAT; USOCR	OR	ON	2007/01/26 16:32
S11 1	0	("20020047852" "20020047852" "20030058210" "20030058210" "3675232" "4042854" "4090219" "4750813" "4864390" "4907862" "4910687" "5122784" "5122792" "5272471" "5327229" "5337171" "5349366" "5414442" "5428366" "5528262" "5642129" "5724058" "5784073" "5874933" "5892496" "5917471" "5953002" "5956105" "5959603" "5990629" "6049367" "6069609" "6072454" "6078304" "6108058" "6184874" "6184874" "6188379" "6188379" "6215466" "6215466" "6292168" "6292168" "6297813" "6297813" "6300927" "6300927" "6320568" "6320568" "6326941" "6326941" "6331844" "6331844" "6369785" "6369785" "6380917" "6380917" "6590581" "6753854").PN. and sposato.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:45
S11 2	3	sposato.in. and (pixel or "liquid crystal display")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:45
S11 3	3	("2.SUP.(M-N)" with pieces) and (pixel or "liquid crystal display")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/26 16:54

## EAST Search History

S11 4	1	"6753854".PN.	USPAT; USOCR	OR	ON	2007/01/26 16:58
S11 5	1	"6897884".PN.	USPAT; USOCR	OR	ON	2007/01/26 17:00
S11 6	1	"20030137478".PN.	US-PGPUB	OR	ON	2007/01/26 17:01
S11 7	1	"20050007331".PN.	US-PGPUB	OR	ON	2007/01/26 17:01
S11 8	1	"6459416".PN.	USPAT; USOCR	OR	ON	2007/01/26 17:03
S11 9	2858	((SHUNPEI) near2 (YAMAZAKI)).INV.	US-PGPUB; USPAT	OR	ON	2007/01/26 18:05
S12 0	825	((JUN) near2 (KOYAMA)).INV.	US-PGPUB; USPAT	OR	ON	2007/01/26 17:17
S12 1	8	S119 and S120 and "2.sup.(m-n)"	US-PGPUB; USPAT	OR	ON	2007/01/26 18:06
S12 2	2	("5900192" or "6521145").pn.	US-PGPUB; USPAT	OR	ON	2007/01/30 18:24